Abstract of the Disclosure

A generalized interface for interconnecting a wide range of electronic musical instruments and signal processing systems includes an outgoing multi-channel audio interface and an outgoing control interface. The outgoing multi-channel audio interface receives instrument audio signals generated by an external musical instrument, while the outgoing control interface receives MIDI control signals generated by the same external musical instrument. The outgoing multi-channel audio interface and the outgoing control interface respectively communicate audio signals and MIDI control signals to the external signal processing system. Variations include the addition of multi-channel audio paths to the instrument using drive transducer signals to excite instrument vibrating elements; the use of control paths to the instrument to control on-instrument lighting, signal processing, drive transducers, controller interpretation, etc.; non-MIDI control paths out of the instrument; providing the instrument with expanded power to supporting on-instrument lighting, video devices, and other auxiliary systems; video signals out of the instrument; and video signals to the instrument to support on-instrument video display.